## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) Vector for the expression of immunoglobulineytokin cytokine fusion proteins in malignant B cells, comprising at least containing the following components operably linked to each other
- (a) a region of at least 1.5 kb which is homologous to a region of the  $\mu$  intron or the k intron;
- (b) at least one DNA sequence encoding a domain of an immunoglobulin or a <u>functional</u> part thereof;
  - (c) a DNA sequence encoding a cytokine; and
- (d) a market gene which is selectable in eukaryotic B cells and contains a functional enhancer region.
- 2. (Original) Vector according to claim 1, wherein said region of at least 1.5 kb contains a functional  $C_{\mu}$  or  $C_k$  enhancer.
- 3. (Original) Vector according to claim 1, wherein said region of at least 1.5 kb contains a non-functional  $C_{\mu}$  or  $C_k$  enhancer.
- 4. (Currently Amended) Vector according to claim 1, wherein the marker gene selectable in eukaryotic B cells contains a non-functional enhancer region.
- 5. (Currently Amended) Vector according to claim 1, wherein the marker gene selectable in eukaryotic B cells lacks an enhancer region.

- 6. (Currently Amended) Vector according to claim 1, wherein the DNA sequence of (b) encodes a constant region or a <u>functional</u> part thereof.
- 7. (Original) Vector according to claim 1, wherein the region homologous to a region comprising the  $C_{\mu}$  or the  $C_{k}$  enhancer of the  $\mu$  or the k intron comprises at least 1.9 kb.
- 8. (Original) Vector according to claim 1, wherein the region homologous to a region comprising the  $C_u$  or the  $C_k$  enhancer of the u or the k intron comprises at least 2.0 kb.
- 9. (Original) Vector according to claim 1, said vector containing a regulatory unit which is compatible with bacteria.
- 10. (Currently Amended) Vector according to claim 1, wherein the immunoglobulin of part b is a chimeric immunoglobulin.
- 11. (Original) Vector according to claim 1, wherein the DNA sequence of (b) encodes the domain of a human immunoglobulin chain.
- 12. (Original) Vector according to claim 1, wherein the DNA sequence of (b) encodes domains derived from mouse, rat, goat, horse or sheep.
- 13. (Original) Vector according to claim 1, wherein the DNA sequence of (b) encodes all the C domains of a secretory antibody.
- 14. (Original) Vector according to claim 1, wherein the DNA sequence according to (b) encodes all the C domains of a membrane-bound antibody.

- 15. (Original) Vector according to claim 1, characterized in that said DNA sequence of (c) encodes interleukins, interferons, colony-stimulating factors, lymphokins or growth factors.
- 16. (Original) Vector according to claim 15, characterized in that said DNA sequence of (c) encodes IL-2, IL-4, IL-7, IL-12, IL-13, GM-CSF or interferon  $\gamma$ .
- 17. (Original) Vector according to claim 1, wherein the selectable marker gene is gpt, eno or a marker gene encoding hygromycin resistance.

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- 25. (Currently Amended) Use of a vector according to claim 1 in the expression of immunoglobulin-eytokin cytokine fusion proteins in malignant B cells.
- 26. (Currently Amended) Use according to claim 25, wherein the malignant B cell is a B cell leukemia cell, a B cell lymphoma cell or a plasmacytoma cell.
- 27. (Original) Use according to claim 25, wherein by expression of the immunoglobulin-eytokin cytokine fusion proteins the activation of T cells is achieved.
- 28. (Original) Use of a vector according to claim 1 in malignant B cells for the vaccination of patients having malignant B cell diseases.
- 29. (Currently Amended) Malignant B cell containing a vector according to claim 1 in integrated form, wherein an immunoglobulin-eytokin cytokine fusion protein is expressed by said cell.

30. (Currently Amended) Use of a malignant B cell which has been rendered replication-incompetent and contains a vector according to claim 1 in integrated form and is capable of expression of an immunoglobulin-eytokin cytokine fusion protein in the treatment of patients having malignant B cell diseases.